Interstate-90
Snoqualmie Pass East
FHWA-WA-EIS-05-01-F
Record of Decision
October 2008

Kittitas County, Washington

Decision

The Federal Highway Administration concurs with the Washington State Department of Transportation in the choice to construct the Preferred Alternative. The Preferred Alternative consists of the Keechelus Lake Alignment Alternative 4 and the connectivity emphasis area options listed herein as the selected alternative for the I-90 Snoqualmie Pass East Project in Kittitas County, Washington.

Keechelus Lake Alignment Alternative 4 and the connectivity emphasis area options shown in Exhibit 1 of this Record of Decision are identified as the environmentally preferable alternative that would meet the project needs as well or better than any of the other alternatives considered. The Preferred Alternative would be less expensive, would present less risk, and would avoid substantial environmental impact on lands adjacent to I-90 between milepost 55.1 east of the Hyak interchange and milepost 70.3 near Easton.

This decision is based on an evaluation of information presented in the Final Environmental Impact Statement, the project's purpose and need, input from the public, and interagency coordination. No comments were received during the 30-day public review period after the Notice of Availability of the Final Environmental Impact Statement appeared in the Federal Register. Additional basis for this decision is contained in the balance of this Record of Decision document.

October 6, 2008
Date of Approval

Daniel M. Mathis
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Division Administrator
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U.S. Department of Transportation
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1. Introduction

The Federal Highway Administration (FHWA) and the Washington State Department of Transportation (WSDOT) are planning to improve a 15-mile corridor of Interstate 90 (I-90) in Kittitas County, Washington. The project corridor begins on the eastern side of Snoqualmie Pass at milepost (MP) 55.1, east of the Hyak interchange, and ends at MP 70.3 near Easton. FHWA is the federal lead agency under the National Environmental Policy Act (NEPA), and WSDOT is the state lead agency under the State Environmental Policy Act (SEPA). The US Forest Service (USFS) and the US Bureau of Reclamation (USBR) are cooperating agencies for this project. (Under NEPA, a cooperating agency is an agency that has a vested interest in a proposed project for which environmental documents would be prepared.) The US Army Corps of Engineers (USACE) declined WSDOT's invitation to be a cooperating agency for the project.

The Draft Environmental Impact Statement (EIS) was released in June 2005 for public comment. The Notice of Availability for the Final EIS appeared in the Federal Register on August 29, 2008. The public review period for the Final EIS ended on September 29, 2008.

FHWA, WSDOT, and the cooperating agencies jointly analyzed the six initial corridor alternatives presented in the Draft EIS, and determined that the Common Route would meet the project needs as well as or better than any of the other alternatives considered, would be less expensive, would present less risk, and would avoid substantial environmental impacts. Following the decision to further study the Common Route Alternative, the I-90 project team developed a range of alternatives for the Common Route. The Preferred Alternative was identified based on input from the WSDOT design team and the Interdisciplinary Team (IDT), a multi-agency advisory body charged with incorporating relevant science and concerns of agency stakeholders, and recommending a Preferred Alternative. This analysis forms the basis for FHWA's selection of the Preferred Alternative in this Record of Decision.

2. Purpose and Need

The purpose of the project is to meet projected traffic demands, improve public safety, and meet the identified project needs for a 15-mile stretch of I-90 between the communities of Hyak and Easton, in Kittitas County, Washington. In general, the purpose of the project is to address avalanches, slope instability, structural deficiencies, traffic volumes, and ecological connectivity.

2.1 Avalanches

I-90 is frequently closed due to avalanches and associated control work. These closures strand motorists and freight on Snoqualmie Pass, resulting in substantial safety hazards to the traveling public, travel delays, and impacts to the state's economy. The traveling public and movement of goods remain at risk as long as the avalanche problem is not resolved. The risk will increase with growth in traffic volumes.

2.2 Slope Instability

I-90 has several unstable slopes, which results in rock and debris falling onto the roadway, causing damage to property and loss of life. These slopes will continue to pose a threat to property and safety if they are not stabilized or if the highway is not realigned to avoid areas of slope instability.

2.3 Structural Deficiencies

The pavement on I-90 is beyond its design life and the roadway is rapidly deteriorating. If it is not repaired or replaced, continued deterioration of the roadway will result in unsafe driving conditions, increased vehicle damage, travel delay, and eventual failure of the roadway.

2.4 Traffic Volumes

Traffic volumes on I-90 are increasing at an estimated rate of 2.1 percent per year and are expected to increase at a similar rate well into the future. Traffic volumes already exceed the highway's design capacity during peak travel periods. The worsening traffic situation may lead to higher numbers of accidents, adverse economic impacts, and increased travel times.

2.5 Ecological Connectivity

Federal land management plans have documented that I-90 forms a barrier to wildlife movement, and have identified the need to increase ecological connectivity across the highway. Improving ecological connectivity will advance federal land management goals by reducing fish and wildlife population isolation. It also will reduce the risks to wildlife and the public from collisions between vehicles and wildlife.

3. Alternatives Considered in the Final EIS

3.1 Route Alternatives

FHWA and WSDOT considered a broad range of potential solutions to the I-90 project's purpose and need. These include alternatives for re-locating the highway away from its current location and managing traffic demand through measures such as signage, highway advisory radio, and electronic changeable message signs. Working with the IDT, the lead agencies developed a set of initial alternatives. The six route alternatives are discussed below.

3.1.1 No-Build Alternative

This alternative, which is required under NEPA, assumed that the existing highway would be maintained and repaired as needed, but that no new construction would take place. The No-Build Alternative was not selected because it would not meet the project's purpose and need.

3.1.2 Limited Construction Alternative

This alternative considered technology-based or policy-based actions, along with mass transit and rail. The Limited Construction Alternative was eliminated from further consideration because using limited construction techniques and expanding mass transit and freight rail systems would not adequately address projected traffic volumes, nor would it meet any of the other project needs.

3.1.3 Rampart Ridge Route Alternative

This alternative would construct a new six-lane highway northeast of Keechelus Lake. The alignment would leave the existing I-90 alignment east of Hyak and rejoin it just west of the Stampede Pass Interchange. The Rampart Ridge Route was eliminated from further consideration because it presented unacceptable levels of environmental impact (such as habitat fragmentation) and cost, and it created a second mountain pass that would expose travelers to more severe winter weather conditions.

3.1.4 Roaring Ridge Route and the Split Route Alternatives

The Roaring Ridge Route would construct a new six-lane highway southeast of Keechelus Lake, from the Hyak Interchange to the Cabin Creek Interchange. The Split Route would construct three new eastbound lanes along the southwest shore of Keechelus Lake and convert that section of the existing highway to westbound lanes. Both these alternatives were eliminated from further consideration because they each presented unacceptable levels of environmental impact (including twice as much wetland and habitat loss) and cost, they created additional operational and maintenance problems due to avalanches and rock fall, and they would require acquiring lands within the Iron Horse State Park right-of-way, which is a Section 4(f) resource.

3.1.5 Common Route (Preferred) Alternative

This alternative would reconstruct the existing highway to six lanes, generally following the existing highway alignment. The Common Route was advanced for further study because it met the project's purpose and need, was feasible in terms of project design and cost, and had acceptable levels of environmental impact compared to the other alternatives.

3.2 Advancing the Common Route

Following the decision to advance the No-Build and Common Route Alternatives for further study, the project team developed a range of build alternatives for the Common Route. All of the Common Route alternatives were designed to meet the project's purpose and need. All would correct problems related to traffic volumes; replace deteriorated pavement, substandard bridges, and interchanges; and add chain-up areas; and would do so in a similar manner. Addressing the remaining project needs required FHWA and WSDOT to make two distinct decisions.

3.2.1 Keechelus Lake Alignment Alternatives

The first decision was how to rebuild the highway along the east shore of Keechelus Lake. WSDOT created four separate alternatives for the 3.3-mile portion of the highway between MP 56.6 just east of Rocky Run Creek and MP 59.9 near Resort Creek, which was referred to in the Draft EIS as the Keechelus Lake Alignment. The unique project needs for this area were reducing avalanche closures, stabilizing slopes, and selecting the design speed. This portion of the highway contains few opportunities to improve ecological connectivity, because of the deeply incised nature of the three streams in this area and the steep slopes bordering the highway.

3.2.1.1 No-Build Alternative

This alternative would include maintenance and repair of the existing highway as needed, but no new construction would take place. This alternative was not selected because it would not meet the project's purpose and need.

3.2.1.2 Keechelus Lake Alignment Alternatives 1, 2, and 3

These three alternatives all contain tunnel designs, which have unique challenges resulting in impacts to design and construction engineering, maintenance operations, and unavoidable filling of high-value wetlands. These alternatives were not selected because the combination of environmental impacts and additional engineering risk combined with increased complexity of construction, operations and maintenance contributed to costs that were two to four times that of the Preferred Alternative. These additional costs would force FHWA and WSDOT to forego other needs such as improvements to ecological connectivity, thereby not meeting the project's purpose and need, or requiring requests for substantially more funding for the project.

3.2.1.3 Keechelus Lake Alignment Alternative 4/Preferred Alternative – Shoreline Alignment

This alternative would meet the project's purpose and need as effectively as the three tunnel alternatives, would avoid the problems associated with tunnels, and would have a substantially lower cost than Alternatives 1, 2, or 3. Alternative 4 was selected because it will allow FHWA and WSDOT to fund all of the planned improvements at a lower cost, while resulting in fewer impacts to high quality wetlands and other resources. Because Alternative 4 would not include tunnels, this alternative would present much lower construction risk, and eliminate important operation and maintenance problems.

3.3 Project Connectivity Emphasis Areas

The second decision was how to improve habitat connections along the remainder of the project corridor. This portion of the highway contains the greatest opportunities to improve ecological and hydrologic connectivity. The more gentle terrain in this part of the project corridor allowed FHWA and WSDOT to meet the remaining project needs while making maximum use of the

existing highway corridor. WSDOT developed three build alternatives for most of the wildlife crossing locations.

FHWA and WSDOT convened the Mitigation Development Team (MDT), a technical advisory group of hydrologists and biologists, to provide a mitigation strategy that would meet the ecological connectivity needs in the project area. In response, the MDT identified 14 locations within the project area that could benefit from connectivity improvements. Most of these were at stream crossings, but some were located within larger wildlife corridors away from streams. These areas are referred to as connectivity emphasis areas (CEAs).

WSDOT identified three potential designs for the connectivity improvements wherever site conditions allowed (Options A, B and C). For the purposes of analysis, the Draft EIS grouped the CEA options into three Improvement Packages: A, B, and C. Package A would be the most expensive, and would provide the greatest level of environmental benefit, and Package C would be the least expensive, with the lowest level of environmental benefit. In general, Package A would include a larger number of longer bridges, while Package C would rely on shorter bridges or bottomless culverts. This accounts for the differences in both effectiveness and cost. In general, the IDT recommended the options included in Improvement Package A for the Preferred Alternative. In the cases where Option A did not represent the best connectivity option, an alternate or modified option was identified (Exhibit 1).

Exhibit 1
The IDT's Recommendations at Individual CEAs

CEA	Recommended Preferred Alternative
Gold Creek	Option A
Rocky Run Creek	Option A
Wolfe Creek	Option A
Resort Creek	Option D
Townsend Creek	Option A Modified
Price/Noble Creeks	Option D
Bonnie Creek	Option A
Swamp Creek	Option B Modified
Toll Creek	Options A/B Modified
Cedar Creek	Option A Modified
Telephone Creek	Option A Modified
Hudson Creek	Option A
Easton Hill	Option A
Kachess River	Option D

3.4 Unique Aspects of the Project

FHWA and WSDOT are required to consider the environmental setting when designing highway improvements. State and federal law and regulations require the lead agencies to engage in a collaborative, interdisciplinary approach to transportation projects that considers the total context within which a project would exist.

This process, which is sometimes called Context Sensitive Solutions or Context Sensitive Design, engages stakeholders throughout the duration of the project, which includes helping to develop the project's purpose and need, and serving on multi-disciplinary advisory teams. The aim of Context Sensitive Solutions is to develop a transportation facility that fits within its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. The federal government adopted Context Sensitive Solutions principles in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (known as SAFETEA-LU) in August 2005. Washington State has adopted these principles in its policy and guidance documents.

In the case of the I-90 project, the context of the project includes the use of Snoqualmie Pass as Washington's largest east-west freight corridor, the location of the project corridor in a high mountain pass with severe terrain restrictions, and the USFS management goals for the surrounding land, which emphasize ecological restoration and the importance of the area as a major wildlife corridor.

FHWA and WSDOT responded to the environmental setting in two primary ways: by using a collaborative, interdisciplinary approach and by including ecological connectivity as one of the project needs.

4. Cooperating Agency Review and Approval

The project area occurs largely within the Okanogan-Wenatchee National Forest. When I-90 was built, the USFS granted FHWA an easement to use National Forest land for highway purposes. Constructing the project would require an additional easement from the USFS for the use of additional federal land. This easement would be granted in response to a request from FHWA and WSDOT, and in order grant this request, the USFS must first find that the project is consistent with its land management direction for the surrounding area. The USFS has indicated that this consistency determination will be made after the project Record of Decision is adopted as part of the USFS plan review and approval process.

5. Measures to Minimize Harm

The project's approach to mitigation began with designing the project to avoid and minimize impacts. These efforts included:

- Identifying project alternatives that would have the lowest level of impact

- Making small adjustments to the location of the new highway to avoid areas of sensitive habitat wherever possible
- Designing the new highway to treat stormwater for the equivalent of all new and impervious surfaces in the project area
- Designing bridges and culverts to state design standards and the performance standards recommended by the MDT and IDT

The lead agencies have committed to using appropriate BMPs to mitigate for the impacts of construction. Construction BMPs are designed to assure compliance with all applicable regulations, permit conditions, and the conditions of the USFS transfer of federal land to FHWA and WSDOT for the expanded highway or USBR's use authorization of USBR-managed lands. These BMPs are specified in Chapter 3 of the Final EIS and are not repeated within this Record of Decision

6. Project Commitments

Compensatory mitigation includes the actions WSDOT will take to replace or substitute for unavoidable environmental impacts. These mitigation commitments are specified below.

6.1 Compensatory Mitigation Measures for the Preferred Alternative

This section describes compensatory mitigation commitments for each element of the environment. FHWA and WSDOT believe that following mitigation there would be no substantial adverse impacts to any element of the environment.

6.1.1 Elements of the Environment with No Permanent Impacts

Since there will be no permanent adverse impacts to geology and soils, air quality, transportation, social and economic resources, hazardous materials and waste, energy, or cumulative impacts, no compensatory mitigation will be required for these elements of the environment.

6.1.2 Water Resources

WSDOT will provide stormwater treatment for the equivalent of all impervious surfaces. To compensate for areas where the terrain makes treatment impracticable, WSDOT will provide additional treatment in other off-site locations in or near the project corridor. WSDOT will use the *Highway Runoff Manual* Appendix 2A procedure or the "equivalent area" approach to mitigate for constrained areas in which stormwater treatment is physically impossible. This approach allows WSDOT to retrofit stormwater treatment onto existing off-site impervious surface with pollution loading characteristics similar to the constrained areas.

6.1.3 Wetlands and Other Jurisdictional Waters

WSDOT has completed a *Conceptual Wetland & Aquatic Resources Mitigation Plan* (Appendix J to the Final EIS). This plan is subject to regulatory review and will be finalized as part of the

project's Clean Water Act Section 404 permit and other applicable permits. WSDOT commits to implementing the measures contained in the final plan.

6.1.3.1 Restoration of Wetlands and Other Aquatic Habitats

WSDOT will restore wetland areas, stream channels, and riparian areas at each CEA where new bridges and culverts are installed. Wetlands and riparian areas probably existed prior to the original highway construction at these locations, and the project has been designed to reestablish connections between wetlands and other high quality habitats, as well as restore channel migration and floodplain functions.

Mitigation measures proposed at locations within and adjacent to CEAs include:

- Restoring and creating wetland, stream, and riparian zone area and function
- Restoring connections between wetlands and other important wildlife habitats
- Restoring channel migration and surface and subsurface flow paths
- Restoring connections between streams, floodplains, and riparian zones
- Restoring passage for fish and aquatic organisms at stream crossings

Impacts from these restoration activities would be limited to soil disturbance during construction. Mitigation sites temporarily affected by construction will be restored once construction is complete. Restoration activities may include:

- Restoring pre-construction contours
- Replacing or amending surface soils
- Planting or seeding with native herbaceous and/or woody vegetation

WSDOT will maintain and monitor all planted areas, based on the commitments made in the final *Wetlands & Aquatic Resources Mitigation Plan*, which will be completed by WSDOT as part of project permitting.

6.1.3.2 Habitat Preservation

Preservation is an important component of reestablishing and maintaining ecological connectivity and protecting large connectivity investments made in the region associated with this and other projects. Although preservation does not replace wetland area or function affected by the project, it has the benefit of providing larger mitigation areas, protecting high-quality, high-functioning wetlands that might otherwise be affected adversely by future development, and removing the uncertainty of success associated with creation or restoration projects.

WSDOT acquired a 265-acre property for habitat preservation in the Gold Creek Valley. This property contains wetlands, riparian areas, and mature forest, including potential habitat for northern spotted owls, marbled murrelets, and bull trout. This property had potential for high-

density development, which will be avoided through this acquisition. WSDOT has committed to preserving this property in perpetuity.

6.1.3.3 Proposed Wetland Mitigation Ratio

WSDOT will compensate for unavoidable impacts to wetland area and function at a minimum 1:1 mitigation ratio, in accordance with Federal Executive Order 11990, Governor's Executive Order 89-10 (Protection of Wetlands: "No Net Loss") and WSDOT Directive 31-12 (Protection of Wetlands Action Plan). A Clean Water Act Section 404 permit will be obtained.

6.1.3.4 Highway Reclamation

As phases of the project are completed, WSDOT will perform extensive restoration activities that include areas of additional forested habitat, highway reclamation, buffer improvements, and highway slope vegetation with native species.

6.1.4 Fish, Aquatic Species, and Habitats

FHWA and WSDOT believe that by combining avoidance, mitigation, and BMPs, the impacts of the project to fish and other aquatic species and their habitats will be minimized. Potential impacts to Columbia River bull trout will be mitigated through compliance with the applicable measures specified in the US Fish and Wildlife Service (USFWS) Biological Opinion. The project also will implement the conservation measures in the *Biological Assessment* and the *Biological Evaluation* (Appendix M to the Final EIS). The remaining impacts will be mitigated through beneficial effects including fish passage restoration, increase in overall habitat, improved in-stream physical processes, and improved water quality. Consequently, no additional compensatory mitigation will be required.

6.1.5 Terrestrial Species

FHWA and WSDOT believe that by combining avoidance, mitigation, and BMPs, the impacts of the project to terrestrial species will be minimized. Potential impacts to the marbeled murrelet and northern spotted owl will be mitigated through compliance with the applicable measures specified in the USFWS Biological Opinion. The project also will implement the conservation measures in the *Biological Assessment* and the *Biological Evaluation.* The project will mitigate for the remaining impacts through the beneficial effects of the build alternatives, which includes improved ecological connectivity, an increase in riparian habitat, and a decrease in wildlife mortality. Consequently, no additional compensatory mitigation will be required. However, WSDOT has acquired areas of mature forest now in private ownership as part of the preservation component for wetlands. WSDOT is also committed to performing pre- and post-construction wildlife monitoring to assess the effectiveness of crossing structure designs and to use the results of this monitoring in the design of the later phases of the project where ever possible.

6.1.6 Noise

WSDOT found that a noise wall at Lake Easton State Park Campground would be both feasible and reasonable. Lake Easton State Park is not within the currently funded portion of the project.

When funding becomes available for this portion of the I-90 project, WSDOT will conduct a supplemental noise analysis that addresses potential noise impacts and the feasibility of a noise barrier wall. WSDOT will continue to consult with State Parks to determine whether a noise wall or other suitable noise mitigation measure is required at Lake Easton State Park.

6.1.7 Historical, Cultural, and Archaeological Resources

FHWA, WSDOT, and the State Historic Preservation Officer (SHPO) agreed on mitigation measures for removing the Lake Keechelus Snowshed Bridge (snowshed). WSDOT has agreed to perform the following measures, all located at Travelers' Rest, a potentially historic WSDOT-owned building located at the Snoqualmie Pass summit:

- Historic structures report for the Travelers' Rest building
- Site assessment of current and potential uses of Travelers' Rest, including mitigation options and needs
- Phase 1 environmental site assessment for hazardous materials
- Interpretive signs at Travelers' Rest depicting historic travel, including Native Americans, over Snoqualmie Pass, history of the Travelers' Rest building and site, and history and engineering facts of the snowshed

6.1.8 Recreation Resources

FHWA and WSDOT will work with the USFS and State Parks to mitigate for the temporary occupancy of the Crystal Springs and Cabin Creek Sno-Parks, and for the loss of the Price Creek Sno-Park (Westbound). WSDOT developed an agreement with State Parks for the Crystal Springs Sno-Park to identify temporary and long-term commitments for the site. WSDOT is working with the USFS to develop a Special Use Permit that will specify details for WSDOT's temporary occupancy of the Cabin Creek Sno-Park and long-term reclamation for the site.

WSDOT will replace the parking afforded by the Price Creek Sno-Park (Westbound) at a location to be determined in consultation with the USFS and State Parks, and the current parking lot will be restored to forested conditions. The new sno-park location will not conflict with resources managed by State Parks or the USFS. WSDOT will not close the Price Creek Sno-Park (Westbound) until funding has been received for the remainder of the project and a replacement site has been identified, designed, and constructed. The Price Creek Sno-Park (Westbound) is not a Section 4(f) resource.

6.1.9 Land Use

In the event that residents or businesses are relocated, WSDOT will comply with the terms of the federal Uniform Relocation Act of 1970, as amended.

6.1.10 Visual Quality

WSDOT will meet the terms of the project *Architectural Design Guidelines* (Appendix X to the Final EIS) and project roadside master plan.

7. Monitoring and Enforcement

The FHWA Division Administrator and the WSDOT Director of Environmental Services will be ultimately responsible for monitoring and enforcing mitigation measures.

WSDOT's South Central Region Engineering and Environmental programs will be responsible for compliance assurance of all related commitments and regulatory permit conditions made or obtained for the project.

Agency Permits and Approvals may include those shown in Exhibit 2.

Exhibit 2
Permits, Approvals, and Agreements

Agency	Regulation	Permit or Approval
Federal		
US Fish and Wildlife Service/National Oceanic and Atmospheric Administration Fisheries	Endangered Species Act Section 7 Consultation and concurrence (impact to listed species) Magnuson-Stevens Fishery Conservation and Management Act Migratory Bird Act	Consultation and Biological Opinion
US Army Corps of Engineers	Clean Water Act (including demonstration that WSDOT has identified the least environmentally damaging practicable alternative) Section 404(b)(1) Alternatives Analysis	Section 404 Individual permit Jurisdictional Determination for Waters of the US
US Forest Service	Memoranda of Understanding between USFS, FHWA and WSDOT	Consistency determination with the USFS Forest Plan(s)
US Forest Service	Organic Act of 1897, National Forest Management Act of 1976	Access Permit(s) and Special Use Permit(s)
US Bureau of Reclamation	Work in Keechelus Lake	Crossing Permit(s) and/or Use Authorization
State		
Washington Department of Archaeology and Historic Preservation	National Historic Preservation Act Section 106 (impact on historic or cultural properties)	Consultation, Memorandum of Agreement for adverse effects between DAHP, FHWA, and WSDOT
Washington State Parks and Recreation Commission	Land and Water Conservation Act Section 6(f) (impact on outdoor recreation properties)	Agreement for use of Crystal Springs Sno-Park
Washington State Department of	Clean Water Act Section 401	Water Quality Certification

Exhibit 2
Permits, Approvals, and Agreements

Agency	Regulation	Permit or Approval
Ecology		
Washington State Department of Ecology	Clean Water Act Section 402 (RCW 90.48)	National Pollutant Discharge Elimination System Permits for Construction, Sand and Gravel, and possible aquatic spraying
Washington State Department of Ecology	Shoreline Management Act (RCW 90.58)	Consider administrative appeals
Washington State Department of Ecology	Oil Pollution Prevention Program (40 CFR 112)	Spill Prevention, Control and Countermeasure Plan
Washington Department of Fish and Wildlife	Construction Projects in State Waters (RCW 77.55)	Hydraulic Project Approval
Washington Department of Natural Resources	Forest Practices Act (RCW 76.09)	Forest Practices Permit (if project would remove trees on state or private land)
Local		
Kittitas County	County Code Shoreline Management Act (RCW 90.58)	Substantial Development Permit(s) and/or exemption(s)
Kittitas County	County Code	Detour and Haul Road Agreements on county roads
Kittitas County	County Code Title 18.08	Floodplain permit
Kittitas County	County Code Title 18.20 Growth Management Act: RCW 36.70A, Critical Areas: WAC 365-190-080(5)	Growth Management Act Critical Areas Ordinance permit
Kittitas County	County Code Title 17.44.150	Noise regulations
Kittitas County	County Code Title 17	Limited Zoning review

CFR – Code of Federal Regulations
DAHP – Department of Archaeology and Historic Preservation
FHWA – Federal Highway Administration
RCW – Revised Code of Washington
USFS – US Forest Service
WAC – Washington Administrative Code
WSDOT – Washington State Department of Transportation

8. Comments Received on the Final EIS and Responses

No comments were received during the 30-day public review period after the Notice of Availability of the Final Environmental Impact Statement appeared in the Federal Register.

9. Determinations and Findings

The environmental record for the I-90 Snoqualmie Pass East Project includes the *I-90 Snoqualmie Pass East Draft Environmental Impact Statement and Section 4(f) Evaluation* (WSDOT 2005), the August 2008 *I-90 Snoqualmie Pass East Final Environmental Impact Statement and Section 4(f) Evaluation*, the *Section 6(f) Evaluation* (Appendix Z to the Final EIS), and the *Section 404(b)(1) Alternatives Analysis* (WSDOT 2007). These documents, incorporated here by reference, constitute the statements required by the National Environmental Policy Act and Title 23 of the United States Code (USC) on:

- The environmental impacts of the project
- The adverse environmental effects that cannot be avoided should the project be implemented
- Alternatives to the proposed project
- Irreversible and irretrievable impacts on the environment that may be involved with the project should it be implemented

Having carefully considered the environmental record noted above, the mitigation measures as required herein, the written and oral comments offered by other agencies and the public on this record, and the written responses to the comments, the FHWA has determined that the Preferred Alternative is also the Environmentally Preferred Alternative. The Preferred Alternative, consisting of Keechelus Lake Alignment Alternative 4 and the CEA Options listed in Exhibit 1 represent the best alternative for construction of the I-90 Snoqualmie Pass East Project.

9.1 Clean Water Act

The Clean Water Act (33 USC §1251 et seq.) establishes the basic structure for regulating discharges of pollutants into the waters of the US and regulating quality standards for surface waters. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System permit program controls water pollution by regulating point sources that discharge pollutants into waters of the US. This project will comply with all regulations based on the Clean Water Act. In addition, WSDOT has committed to treating stormwater runoff for the equivalent of all new and existing impervious surfaces in the project area.

9.2 Section 106

The National Historic Preservation Act of 1966 (NHPA) (16 USC 470) sets forth government policy and procedures regarding "historic properties," that is, districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places (NRHP). See also 36 Code of Federal Regulations Part 800.

Section 106 of the NHPA requires federal agencies to take the effects of their actions on historic properties into account. Within the project area, WSDOT found a total of 21 historic, architectural, or archaeological resources. One site, the snowshed, is listed on the NRHP, and 12 other sites were eligible for listing. WSDOT analyzed removal of the snowshed under Section 106 of the NHPA, and Section 4(f) of the Department of Transportation Act of 1966.

FHWA and WSDOT, in consultation with the SHPO and Tribal Historic Preservation Officers, determined that no cultural or archaeological resources would be adversely affected, and only one historic resource (the snowshed) would be adversely affected by the project. Following the decision to remove the snowshed, WSDOT made a separate determination of impact for that resource and concluded that there would be an adverse impact. The Washington State Department of Archaeology and Historic Preservation (DAHP) concurred with these determinations. WSDOT, FHWA, and DAHP signed a Memorandum of Agreement on October 10, 2007 (Appendix C to Chapter 5 of the Final EIS). This agreement commits FHWA and WSDOT to carry out measures to mitigate for adverse impacts to the snowshed.

9.3 Endangered Species Act

The Endangered Species Act (ESA) of 1973 (16 USC § 1531 et seq.), as amended, is intended to protect threatened and endangered species and the ecosystems on which they depend. When the federal government takes an action subject to the ESA, it must comply with Section 7 of the ESA [found at 16 USC § 1536(a)(2)]. Section 7 (a)(2) states:

> *Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.*

The project may affect, and is likely to adversely affect Columbia River bull trout, marbeled murrelet, and northern spotted owl. The project may affect, but is not likely to adversely affect

Middle Columbia River steelhead, gray wolf, grizzly bear, Canada lynx, and bald eagle. The project would have no effect on Ute Ladies'-tresses.

A *Biological Assessment* for the project (Appendix M to the Final EIS) was submitted to the USFWS. The USFS completed a *Biological Evaluation* (Appendix M to the Final EIS) on May 2, 2008. A concurrence letter dated April 7, 2008 was received from the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries). The USFWS has provided a Biological Opinion with an incidental take statement and permit containing reasonable and prudent measures, terms and conditions, and conservation recommendations. The project will incorporate measures to minimize harm outlined in the *Biological Assessment* (Appendix M to the Final EIS) and Biological Opinion.

9.4 Magnuson-Stevens Act

Under the 1996 Magnuson-Stevens Fisheries Conservation and Management Act (Public Law 94-265), as amended, federal fisheries management regulations require identification and conservation of habitat that is essential to federally managed fish species. Essential fish habitat is defined as "*those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity*." If an action will adversely affect essential fish habitat, NOAA Fisheries is required to provide the federal action agency with essential fish habitat conservation recommendations (Magnuson-Stevens Act Section 305[b][4][A]). Appendix E of the *Biological Assessment* (Appendix M to the Final EIS) contains an essential fish habitat assessment in response to requirements of the Magnuson-Stevens Act.

9.5 Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 USC 303 and 23 USC 138, declares that

> *It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.*

Section 4(f) specifies that

> *The Secretary [of Transportation] may approve a transportation program or project ... requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:*
>
> *1. There is no prudent and feasible alternative to using that land; and*

2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

WSDOT anticipates that the Preferred Alternative presented in the Final EIS would require removing the existing historic Lake Keechelus Snowshed Bridge. Removing the NRHP-listed snowshed resulted in a finding of adverse effect to the snowshed, which re-initiated Section 106 consultation with the SHPO.

While cultural and historic resources are recognized as important factors in preservation, FHWA and WSDOT believe that removing the Lake Keechelus Snowshed Bridge and constructing a larger, safer structure best meets the project's purpose and need. There are no other alternatives that meet the project's purpose and need that can be constructed at reasonable expense and/or that do not present substantial environmental impacts and operational, constructability, and safety concerns.

9.6 Section 6(f) of the Land and Water Conservation Funds Act

The Land and Water Conservation Fund Act of 1965 states that the

purposes of this Act are to assist in preserving, developing, and assuring accessibility to all citizens of the United States of America of present and future generations and visitors who are lawfully present within the boundaries of the United States of America such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to strengthen the health and vitality of the citizens of the US by

(1) providing funds for and authorizing Federal assistance to the States in planning, acquisition, and development of needed land and water areas and facilities and

(2) providing funds for the Federal acquisition and development of certain lands and other areas.

Since the build alternatives have the potential to affect publicly-owned parks and recreation lands, WSDOT has completed a *Section 6(f) Recreation Lands Technical Memorandum* (16 U.S.C. 460) (Appendix T of the Final EIS). The memorandum discusses the use of Land and Water Conservation Fund Act grant money to purchase or develop recreation property in the project corridor and potential impacts to those properties. It documents that no recreation properties funded with Land and Water Conservation Fund grants through the Interagency Committee for Outdoor Recreation would be converted to a non-recreation use by the project.

9.7 Environmental Justice

An analysis of environmental justice is included in Section 3.13 of the Final EIS. Consistent with Presidential Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (US Department of Housing and Urban Development 1994), FHWA Order 6640.23, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1998), and Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (1997), the FHWA has concluded that the Preferred Alternative would have little to no impact to private property owners and the Preferred Alternative would not disproportionately affect low-income or minority populations.

9.8 Conformity with Air Quality Plans

An analysis of air quality, conformity with the Federal Clean Air Act (42 USC 7506[c]) is included in Section 3.2 of the Final EIS. The Draft and Final EIS concluded that federal, state, and regional air quality standards, including the NAAQS and Clean Air Act standards, would be met under any of the build alternatives.

9.9 Secondary and Cumulative Impacts

An evaluation of possible induced growth and secondary impacts is required by NEPA, as discussed in Section 3.16 of the Final EIS. FHWA and WSDOT anticipate that the project would not create any cumulative adverse impacts.

9.10 Agency Coordination

9.10.1 Partnerships

FHWA and WSDOT have formed unique partnerships with county, state, and federal agencies; as well as conservation organizations and universities. The partners include USACE, USBR, US Department of the Interior, US Environmental Protection Agency, USFWS, USFS, NOAA Fisheries, Central Washington University, Montana State University Western Transportation Institute, Washington State Department of Ecology, State Parks, Washington Department of Fish and Wildlife, Kittitas County, Washington State Good Roads & Transportation Association, Port of Seattle, Port of Tacoma, Washington Trucking Association, Freight Mobility Strategic Investment Board, Cascade Land Conservancy, I-90 Wildlife Bridges Coalition, and Mountains to Sound Greenway Trust.

9.10.2 Signatory Agency Committee Concurrence

WSDOT is a partner in the Signatory Agency Committee (SAC) Agreement. This agreement provides a general framework for integrating the permitting and environmental review processes for transportation projects. The SAC Agreement establishes points of agency concurrence at three key project development stages: establishing project purpose and need, defining the alternatives to be considered, and identifying the preferred alternative.

The SAC concurred with the project purpose and need in February 2001, the alternatives to be considered in July 2002, and identification of the Preferred Alternative in January 2008.

9.10.3 US Forest Plan Consistency Review

The project area occurs largely within the Okanogan-Wenatchee National Forest. When I-90 was built, the USFS granted FHWA an easement to use National Forest land for highway purposes. Constructing the project would require an additional easement from the USFS for the use of additional federal land. This easement would be granted in response to a request from FHWA and WSDOT, and in order grant this request, the USFS must first find that the project is consistent with its land management direction (the Northwest Forest Plan and Snoqualmie Pass Adaptive Management Area Plan) for the surrounding National Forest. The USFS will base the consistency determination on whether the project meets its purpose and need, as well as the requirements of other USFS standards and guidelines.

The project must meet its stated purpose and need, including ecological connectivity. One component of this determination will be the extent to which the project meets ecological connectivity and the MDT's recommended performance standards. WSDOT analyzed all of the MDT's design objectives and performance standards for each CEA, and incorporated them into the project design where they were applicable and reasonable. The USFS reviewed and commented on WSDOT's analysis. The USFS also analyzed how and to what extent the MDT's design objectives and performance standards met the USFS Aquatic Conservation Strategy (ACS) objectives. WSDOT has incorporated the nine ACS objectives into the project's design, in the form of connectivity and mitigation performance standards and restoration measures.

The project also must meet the requirements of the *Memorandum of Understanding Between United States Department of Agriculture Forest Service and United States Department of Transportation Federal Highway Administration Regarding the Appropriation and Transfer of National Forest System Lands for Highway Purposes* (USFS and FHWA 1998).

9.10.4 Tribal Consultation

FHWA and WSDOT followed an ongoing program of government-to-government consultation with affected Native American tribes. Tribal consultation has emphasized potential impacts to cultural and natural resources; however, WSDOT has briefed affected tribes on all aspects of the project and will continue to do so. Tribes included in this continuing consultation are the Yakama Nation, Snoqualmie Tribe, Tulalip Tribe, Muckleshoot Tribe, Confederated Tribes of the Colville Reservation, and Wanapum Tribe.

10. Conclusion

For the reasons outlined above, the Preferred Alternative is the alternative that best meets the purpose and need of the project, and will have the least impact to the human and natural environment. The Preferred Alternative would be less expensive, would present less risk, and

would avoid substantial environmental impact on lands adjacent to I-90 between milepost 55.1 east of the Hyak interchange and milepost 70.3 near Easton.

This decision is based on an evaluation of information presented in the Final EIS, the project's purpose and need, interagency coordination, input from the public, and the factors and commitments outlined above. No comments were received during the 30-day public review period after the Notice of Availability of the Final EIS appeared in the Federal Register.

FHWA selects the Preferred Alternative for construction of the I-90 Snoqualmie Pass East Project. The Preferred Alternative consists of the Keechelus Lake Alignment Alternative 4 and the CEA options listed herein (Exhibit 1) as the selected alternative for the I-90 Snoqualmie Pass East Project in Kittitas County, Washington. FHWA finds that all practicable measures to minimize environmental harm have been incorporated into the project. FHWA will ensure that the commitments outlined above and in the Final EIS will be implemented as part of the project design, construction, and post-construction monitoring.

11. References

US Department of Housing and Urban Development. 1994. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

US Forest Service and Bureau of Land Management (USFS and BLM). 1994. Record of Decision for the Northwest Plan: National Forest Service and Bureau of Land Management Districts Within the Range of the Northern Spotted Owl Western Oregon, Washington and Northwest California. Northwest Region.

US Forest Service and Federal Highway Administration (USFS and FHWA). 1998. Memorandum of Understanding Between United States Department of Agriculture Forest Service and United States Department of Transportation Federal Highway Administration Regarding the Appropriation and Transfer of National Forest System Lands for Highway Purposes. August 20.

US Forest Service and US Fish and Wildlife Service (USFS and USFWS). 1997. Snoqualmie Pass Adaptive Management Area Plan FEIS. Cle Elum and North Bend Ranger District, Wenatchee and Mt. Baker-Snoqualmie National Forests. Pacific Northwest Region.

Washington State Department of Transportation (WSDOT). 2005. I-90 Snoqualmie Pass East Draft Environmental Impact Statement and Section 4(f) Evaluation. June.

———. 2006. *Highway Runoff Manual*. Publication M 31-16.

———. 2007. Section 404(b)(1) Alternatives Analysis. I-90 Snoqualmie Pass East Project.

Washington State Parks and Recreation Commission (State Parks). 2007. I-90 Corridor Winter Recreation Strategy. June.

RECORD OF DECISION APPROVAL

The Record of Decision for the I-90 Snoqualmie Pass East project is hereby approved.

October 6, 2008

Date

Daniel M. Mathis

Daniel M. Mathis, PE

Division Administrator

Federal Highway Administration